United States Environmental Protection Agency

OSWER/OSRTI
State, Tribal, and Site Identification Branch
Washington, DC 20460

NATIONAL PRIORITIES LIST (NPL)

****Proposed Site****

April 2006

MAUNABO URBANO PUBLIC WELLS | **Maunabo, Puerto Rico**

Site Location/Size:

The Maunabo Urbano Public Wells site consists of a ground water plume with no identified source(s) of contamination. It is located in the municipality of Maunabo, Puerto Rico, in the southeastern area of the island. The size of the plume of contamination has not been determined as yet, but EPA is currently conducting work to better define the nature and extent of the contamination.

Site History:

The Maunabo Urbano public water system consists of four ground water wells: Maunabo 1, Maunabo 2 (Bordaleza), Maunabo 3 (Calzada), and Maunabo 4 (San Pedro). Maunabo 1 went into service in 2001, while the other wells were in service prior to that time. Ground water samples collected by the system's operator, the Puerto Rico Aqueduct and Sewer Authority (PRASA), indicate that chlorinated solvents have been detected in Maunabo 1 since March 2002. At that time, the Puerto Rico Department of Health ordered PRASA to close the well because the concentration of one of the solvents exceeded the federal Maximum Contaminant Level (MCL). However, PRASA opted to treat the ground water with carbon filtration tanks at the wellhead rather than close the well in order to meet water supply needs. Since then, the detections of solvents in raw ground water samples from Maunabo 1 have exceeded the MCL on numerous occasions. Samples taken after treatment, including tap water samples collected along the distribution system down-line from Maunabo 1, indicate that the treatment has not been effective. EPA is providing an alternative source of water to protect public health.

Site Contamination/Contaminants:

The contaminants of concerns are industrial solvents, including tetrachloroethylene (PCE), trichloroethylene (TCE), and cis-1,2-dichloroethylene (DCE). Of these, PCE has been detected above federal MCLs in drinking water supplies.

Potential Impacts on Surrounding Community/Environment:

Ground water and distribution water samples collected by EPA in October 2005 confirm the presence of PCE and cis-1,2-DCE in Maunabo 1 and in post-treatment samples along the distribution line. These most recent results also indicate the presence of a related compound, 1,1-DCE, in Maunabo 4, which may indicate the spreading of contamination.

The Maunabo Urbano water system serves a total population of approximately 14,000 people apportioned equally among the four public supply wells (i.e., 3,500 per well). Therefore, the contaminated wells in this system, Maunabo 1 and 4, serve almost 7,000 people. Wellhead Protection Areas are delineated for the public supply wells, so the plume lies within a designated Wellhead Protection Area.

Response Activities (to date):

EPA has an ongoing investigation into the contamination at the wells, including efforts to locate the source(s) of the contamination. In November, 2005, EPA began sub-surface geological work to assist in this effort. EPA is providing an alternative source of water to protect public health.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1-888-42-ATSDR or 1-888-422-8737.